APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,719	05/24/2001	Brian L. Brinker	RSW920010023US1	2801

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EXAMINER
WONG, LESLIE

ART UNIT	PAPER NUMBER
2167	

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/864,719	BRINKER ET AL.
	Examiner	Art Unit	
	Leslie Wong	2167	

-- The MAILING DATE of this communication appears on the cover sheet with th correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- . If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _____ .

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-9,11-17,19 and 20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-9,11-17,19 and 20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____ .

DETAILED ACTION

Response to Amendment

1.   Receipt of Applicant's Amendment, filed 24 June 2004, is acknowledged.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

3.   Claims 1,2, 4-6, 8, 9, 11-14, 16, 17, and 19 are rejected under 35 U.S.C. 103(a)

as being unpatentable over **Amado** (U.S. Patent 5,701,400) in view of **Miller et al.** (U.S.

Patent 6,553,366 B1).

Regarding claims 1, 11, and 16, **Amado** teaches a method and a computer program product of systematically diagnosing data problems in a database, comprising the steps of:

a).   identifying a set of tests to be performed on the database (Figs. 4 and 12 and col. 38, lines 12-29);

b).   preparing a test program corresponding to the set of tests using SQL (Structured Query Language) (col. 11, lines 56-57);

c).   executing the test program on the database so that the set of tests are performed on the database simultaneously (col. 39, lines 1-5); and

d).   automatically providing results of the test program in a predetermined format, whereby data problems in the data base can be diagnosed by viewing the results (col. 39, lines 16-29).

Amado further teaches wherein the preparing step is implemented using WITH (i.e., include that test with larger set of queries) (col. 74, lines 34-38).

Amado does not explicitly teach wherein the preparing step is implemented using WITH and OUTER JOIN commands of the SQL.

Miller et al., however, teaches wherein the preparing step is implemented with an OUTER JOIN command of the SQL (col. 17,lines 23-30).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Miller's** teaching would have allowed **Amado's** to provide user with all rows for all key columns

found in the first table specified, and fills in any missing values from the other tables

with null values (col. 17, lines 26-29).

Regarding claims 2, 9, and 17, **Amado** further teaches wherein the

predetermined format is a table format (Figs. 99-101).

Regarding claims 4, 12, and 19, **Amado** further teaches wherein at least one of

the set of tests involves performing a test on a particular record stored in a table of the

database, said record being identifiable by one or a combination of key values (col. 36,

lines 33-41).

Regarding claims 5 and 13, **Amado** further teaches wherein, in the preparing

step, the test program is prepared manually (col. 20, lines 20-25 and lines 56-63).

Regarding claims 6 and 14, **Amado** further teaches wherein, in the preparing

step, the test program is prepared by computer software (col. 26, lines 16-17 and col.

38 lines 13-16).

Regarding claim 8, **Amado** further teaches A system for systematically

diagnosing data problems in a database, comprising:

a). a database including a plurality of tables, each table containing at least one row of data, each row identifiable by one or a combination of key values (Fig. 72); and

b). a testing module (Fig.2, element 10), coupled to the database (Fig. 2, elements 5, 7, and 9), for storing a test program written in SQL (Structured Query Language), executing the test program on the database (col. 39, lines 1-5), and

c). automatically providing results of the test program in a predetermined format, wherein the test program corresponds to a collection of tests for diagnosing data problems in the database (col. 39, lines 16-29).

4. Claims 7, 15, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Amado** (U.S. Patent 5,701,400) in view of **Miller et al.** (U.S. Patent 6,553,366 B1) as applied to claims 1,2, 4-6, 8, 9, 11-14, 16, 17, and 19 above in view of **Bogrett** (U.S. Patent 6,581,054 B1).

Regarding claims 7, 15, and 20, **Amado** further teaches preparing the test program based on the user's response (col. 24, lines 13-23 and 24-27).

Amado and Miller do not explicitly teach the steps of:

a). displaying a set of predetermined queries to a user; and

b). receiving the user's response to each of the predetermined queries.

Bogrett, however, teaches the steps of:

a). displaying a set of predetermined queries to a user (col. 2, lines 7-8); and

b).   receiving the user's response to each of the predetermined queries (col. 2,

lines 8-10).

It would have been obvious to one of ordinary skill in the art at the time of the

invention was made to combine the teachings of the cited references because

Bogrett's teaching would have allowed **Amado- Miller's** to enable users to quickly and

and easily adpt predefined queries to their particular needs by presenting predefined

query models to users for customization in order to retrieve relevant information for

users specific requirements as suggested by **Bogrett** at col. 1, line 67 – col. 2, line 3.

Response to Argument

5.   Applicant's arguments filed 24 June 2004 have been fully considered but they

are not persuasive.

Applicant argue that he has identified the WITH command of SQL as being

particularly useful for this process, and in combination with the OUTER JOIN command

as claimed, provides a simple way for testing of the database and display of the results

in a user-friendly manner. In response to the preceding arguments, Examiner

respectfully submits that Amado teaches an artificial intelligence technology that

generates diagnostics of information in the database. The diagnostics are stored in a

database which can be queried using the SQL as standard interface language with

downdrilling to the associated data which generated the diagnostic (abstract and col.

11, lines 56-57). Miller teaches an analytic logical data model used for data mining

applications in a relational database management system (col. 1, lines 59-62). Miller

uses the SQL statements and programmatic iteration together to perform computations

and order data within the relational database (col. 11, lines 28-34). In particular, Miller

teaches performing a LEFT outer join which returns rows for all key column values

found in the first table, and fills in any missing values from the other tables with null

values from the other tables with null values to support data reorganization. The data

reorganization function that supports the JOIN function that joins tables together into a

combine result table (col. 17, lines 13-17) which is in conformity with the Applicant's

invention of simplifying the displaying of the results of the multiple tests as indicated on

page 10 second paragraph of in Applicant's Response. The fact that the SQL language

will allow the combination WITH and OUTER JOIN in a select statement would further

support the Examiner's position for combining Amado and Miller references. For the

above reasons, Examiner submits that the combination of Amado and Miller would

arrive at Applicant claimed limitations. Evidence of a suggestion, teaching or motivation

to combine prior art references may flow, inter alia, from the references themselves, the

knowledge of one of ordinary skill in the art or from the nature of the problem to be

solved. See In re Dembiczak, 175 F.3d 994, 1000, 50 USPQ2d 1614, 1617 (Fed. Cir.

1999).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

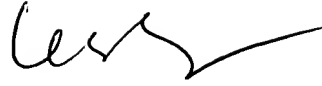A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Leslie Wong whose telephone number is (571) 272-

4120. The examiner can normally be reached on Monday to Friday 9:30am - 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John E Breene can be reached on (571) 272-4107. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Leslie Wong
Patent Examiner
Art Unit 2167

LW
20 December 2004

Primary Examiner